(19) World Intellectual Property Organization International Bureau

(43) International Publication Date 4 August 2005 (04.08.2005)





PCT

(10) International Publication Number WO 2005/071006 A 1

(51) International Patent Classification⁷: 5/54, C08L 83/04

C08K 5/09,

(21) International Application Number:

PCT/US2005/002030

- (22) International Filing Date: 21 January 2005 (21.01.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/538,186

22 January 2004 (22.01.2004) US

- (71) Applicant (for all designated States except US): DOW CORNING CORPORATION [US/US]; 2200 West Salzburg Road, Midland, MI 48686-0994 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): AHN, Dongchan [US/US]; 2115 Wilmington Drive, Midland, MI 48642 (US). SHEPARD, Nick, Evan [US/US]; 2333 Perrine Road, Midland, MI 48642 (US). FOWLER, Harold, Christian [US/US]; 6005 Foxboro Court, Midland, MI 48640 (US). NICHOLS, Kevin, Louis [US/US]; 12629 Whisper Ridge Drive, Freeland, MI 48623 (US). WARAKOMSKI, John, Matthew [US/US]; 2701 Mount Vernon Drive, Midland, MI 48642 (US).
- (74) Agents: LAPRAIRIE, David, M. et al.; Howard & Howard Attorneys, P.C., Suite 101, 39400 Woodward Avenue, Bloomfield Hills, MI 48304-5151 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE. AG. AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A COMPOSITION HAVING IMPROVED ADHERENCE WITH AN ADDITION-CURABLE MATERIAL AND COMPOSITE ARTICLE INCORPORATING THE COMPOSITION

(57) Abstract: A composition and composite article have improved adherence with an addition-curable material. The composition and therefore the composite article, which includes at least one substrate formed from the composition, include a resin and an additive that is incorporated into the resin. The resin is organic and polymeric and free of ethylenically unsaturated and silicon hydride functional groups. The additive is selected from the group of a fluorine-substituted organopolysiloxane, an amino-functional organopolysiloxane, an unsaturated carboxylic acid or carboxylic acid salt, and combinations thereof. Further, the additive includes a hydrosilylation reactive group present at a surface of the substrate for reaction with the addition-curable material. This improves adherence of the substrate with the addition-curable material. The substrate and the addition-curable material bond together to make the composition article.



005/071006